IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 17 and ADD claims 22-24 and reconsider the claims in accordance with the following:

1-16 (CANCELLED)

17. (CURRENTLY AMENDED) An apparatus for providing a tracking error signal for an optical disk recording track, comprising:

a plurality of optical detectors each of which generates an electrical signal,

a matrix circuit which selects and adds said electrical signals in pairs to output at least one matrixed signal, each said pair corresponding to optical information detected along a line diagonal to said recording track;

a circuit which binarizes each matrixed signal;

a phase lock loop circuit receiving a first clock signal having a higher frequency than the matrixed signals and each matrixed signal, the phase lock loop circuit outputting second and third clock signals synchronized with the respective matrixed signals and having the same frequency as the first clock signal; and

a phase detector which compares a phase of the second synchronized clock signal with a phase of the third synchronized clock signal to generate the tracking error signal, wherein the tracking error signal is independent of a length of pits and/or marks on the optical disk recording track.

18. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 17, further comprising first and second equalizers which increase a high frequency component of respective ones of the matrixed signals prior to respectively binarizing said matrixed signals.

19-21 (CANCELLED)

22. (NEW) A tracking error detecting apparatus to produce a tracking error signal as a difference signal of optical detection signals generated by a plurality of optical detectors, the apparatus comprising:

a plurality of binarizers which binarize each of the optical detection signals;

a plurality of phase locked loops which each generate clock signals synchronized with each of the outputs of the plurality of binarizers;

a phase difference detector which detects a phase difference between the generated clock signals output from the plurality of phase locked loops; and

low-pass filters which filter the outputs of the phase difference detector to output the result as the tracking error signal.

23. (NEW) The tracking error detecting apparatus as claimed in claim 22, further comprising equalizers which reinforce high-frequency components of the optical detection signals and output the results to the binarizers.

24. (NEW) The tracking error detecting apparatus as claimed in claim 22, wherein a clock signal provided to the phase locked loops is a channel clock signal.